REMARKS

Claims 1 through 3, 7 through 11, 13 through 20, 22 and new Claim 23 are pending in the application.

Claim 1 has been amended to reflect that the overlayer (A) may "optionally" include poly(m-xyleneadipamide). Support for this amendment can be found in the Application-as-filed, for example on Page 9, lines 9 through 10.

Claim 1 has additionally been amended to reflect highly advantageous embodiments in which the overlayer (A) exhibits a gloss of greater than 100 and further includes from 0.0001 to 0.5 wt% antiblocking agents. Support for this amendment can be found in the Application-as-filed, for example on Page 9, lines 19 through 21 in conjunction with Page 10, lines 5 through 7.

Claim 7 has been amended to delete the term "thermoplastic." Support for this amendment can be found in the Application-as-filed.

Claim 23 has been added to complete the record for examination and highlight advantageous embodiments of the invention.

Claim 23 is directed to reflect advantageous inventive films exhibiting an opacity of less than 10%, in which the poly(m-xyleneadipamide) is present within the base layer in amounts ranging from 4 to 30% by weight. Support for Claim 23 can be found in the Application-as-filed, for example on Page 14, Table 1.

Applicants respectfully submit that this response does not raise new issues, but merely places the above-referenced application either in condition for allowance, or alternatively, in better form for appeal. Reexamination and reconsideration of this application, withdrawal of all

rejections, and formal notification of the allowability of the pending claims are earnestly solicited in light of the following remarks.

Obviation of 35 USC 112 Rejection

Claims 3 and 19 stands rejected due to their respective recitations that the overlayer (A) either includes poly m-xyleneadipamide (Claim 3) or does not include poly m-xyleneadipamide (Claim 19). Applicants respectfully submit that Claim 1's recited term of "up to 20%" poly(m-xyleneadipamide) includes 0%. However, solely to advance prosecution of the case, Claim 1 has been subjected to a non-narrowing amendment reflecting that the overlayer (A) may optionally include poly(m-xyleneadipamide). Thus Claim 3 is directed to particular embodiments of the invention which do, in fact, include poly(m-xyleneadipamide) within the overlayer (A). In contrast, Claim 19 is directed to advantageous embodiments in which the overlayer (A) contains no poly(m-xyleneadipamide).

Accordingly, Applicants respectfully request withdrawal of this rejection, as well.

Claim 7 stands rejected over the term "thermoplastic" due to a lack of antecedent basis. Claim 7 has been amended to delete the term "thermoplastic." Applicants respectfully submit that the foregoing non-narrowing amendment was made solely to advance prosecution.

Accordingly, Applicants respectfully request withdrawal of this rejection, as well.

The Claimed Invention is Patentable
in Light of the Art of Record

Claims 1 through 3, 7 through 11, 13 through 18, 20 and 22 remain rejected as anticipated by United States Patent No. 4,957,980 ("US 980") to Kobayashi et al. Claim 19 stands rejected as obvious in light of US 980.

It may be useful to briefly consider the invention before addressing the merits of the rejection.

As noted in Applicants Amendment of July 31, 2006, poly (m-xylene adipamide) ("MXD6") and polyester are incompatible, hence films formed to-date have suffered from poor optical properties. As a result, conventional films formed from polyester/MXD6 blends are known to exhibit decreased transparency, i.e. elevated opacity, as expressly discussed within US 980. (The Examiner's attention is kindly directed to US 980, Col. 1, lines 56 – 60). In addition, conventional films formed from polyester/MXD6 blends are also known to suffer from a lower gloss appearance.

Quite unexpectedly, Applicants have determined that the incorporation of MXD6 having a similar viscosity to the remainder of the polymer melt results in films having improved optical properties. Applicants more particularly found that an excessive viscosity differential between the polymer melt and MXD6 leads to melt separation, flow elevations/projections, flow disruptions and streak formation.

Applicants have further determined that lightly filled overlayers may be used to provide an extremely beneficial balance of high gloss and runnability to polyester films incorporating MXD6.

Accordingly, the claims are directed to biaxially oriented polyester films having a base layer (B) and at least one overlayer (A). At least the base layer (B) includes MXD6 having a melt viscosity smaller than 2000 poises. The base layer (B) and overlayer (A) are advantageously formed from polyester consisting essentially of polyethylene terephthalate, polyethylene 2,6-naphthalate, poly-1,4-cyclohexane-dimethylene terephthalate, polyethylene 2,6-naphthalate bibenzoate and mixtures thereof. The resulting inventive films exhibit an oxygen transmission (OTR) smaller than 50 cm^3 m^{-2} d^{-1} $bar^{-1}$and an opacity of less than 20%. The overlayer (A)

further exhibits a gloss of greater than 100 and advantageously contains from 0.0001 to 0.5 wt% antiblocking agents.

Consequently, the inventive films provide a heretofore unknown balance of suppressed oxygen transmission rates with low opacity, high gloss and superior runnability.

US 980 does not teach or suggest the claimed invention.

In contrast to the recited biaxially oriented films, US 980 is primarily directed to molded articles, which US 980 generically indicates may be either single layered or "multilayered." (Col. 2, lines 20 – 23). Applicants respectfully reiterate that the entire impetus of US 980 is a polyester-based compatibilizer for use within polyester/polyamide molding compositions. (Col. 1, lines 61 – 68; Col. 1, lines 5 - 9; Col. 4, lines 40 – 43; Col. 2, line 61 – Col. 3, line 12 and Col. 3, lines 18 – 20). US 980 expressly notes that the transparency of compositions that include a "simple blend" of polyester and polyamide (such as provided within the claimed invention) is "remarkably decreased," thus their use is "extremely limited." (Col. 1, lines 29 – 60).

After "intensively" studying the issue, US 980 teaches that the elevated opacity exhibited by polyester/polyamide blends is reduced by incorporation of a polyester-based compatibilizer. (Col. 1, lines 61 – 68). The compatibizer is specifically a polyester resin that has been grafted with an unsaturated carboxylic acid. (Col. 3, lines 26 – 29). This polyester-based compatibilizer may be present in amounts of up to 50 parts by weight. (Col. 4, lines 4 – 7). US 980 goes on to generically note that its' molding compositions may include further "additives," such as antioxidants and colorants, in undisclosed amounts. (Col. 4, lines 10 – 15).

Applicants respectfully reiterate that the comparative compatibilizer-free polyester/polyamide examples of US 980 exhibit a maximum transparency of only 75 %. (Table 1, Comparative Example 3). Only the pure polyester resin, i.e. the comparative example without either compatibilizer or polyamide, exhibits a transparency of 90%. (Table 1, Comparative

Example 1). Applicants respectfully make of record that the haze value noted within the outstanding Office Action (Page 4, 1st full paragraph, 2nd sentence) is merely a reflection of the film's diffusivity, but not its opacity. Haze is thus not interchangeable with either transparency or opacity, as apparently urged within the Office Action.

US 980 thus does not teach or suggest the claimed invention.

Applicants respectfully reiterate that there would have been no motivation to have looked to US 980.

However, even if Applicants had looked (which they did not) the present invention would not result. The impetus of US 980 is the required incorporation of a grafted polyester to improve the optical properties of polyester/polyamide blow molding blends.

Accordingly, US 980 can not teach or suggest the recited biaxially oriented polyester films having a base layer (B) and overlayer (A) formed from polyester consisting essentially of polyethylene terephthalate, polyethylene 2,6-naphthalate, poly-1,4-cyclohexane-dimethylene terephthalate and polyethylene 2,6-naphthalate bibenzoate and mixtures thereof.

Applicants respectfully reiterate there would have been no expectation of success for the recited films based upon US 980, as the recited polyesters clearly exclude the required grafted polyester. Applicants further respectfully reiterate that to modify US 980 so as to exclude its required grafted polyester would render it unit for its intended purpose. MPEP 2143.01 (citing *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984)).

Nor does US 980, generically noting multi-layered hollow articles, teach or suggest the recited multilayered biaxially oriented polyester films, much less such films in which the base layer includes poly(m-xyleneadipamide) having a melt viscosity smaller than 2000 poise.

And US 980, merely generically noting "additives", most certainly does not teach or suggest that advantageous multi-layered biaxially oriented films further having an overlayer (A) including from 0.0001 to 0.5 wt% antiblocking agents would provide a gloss value of greater than 100, along with improved runnability.

Nor does US 980, generically referring to the "molding" of its articles, teach or suggest the recited biaxially oriented films having a planar orientation of less than 0.160 and an opacity of less than 15 %, as recited in Claim 14. Applicants respectfully reiterate that the Office Action has failed to provide sufficient factual and technical grounds to establish that the purportedly inherent elements necessarily flow from the teachings of the prior art. *Transclean Corp. v. Bridgewood Services, Inc.*, 62 USPQ 2d 1865 (Fed. Cir. 2002)(holding that inherency requires the reference to necessarily include the unstated limitation); see also *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)(holding that the claimed feature must necessarily be present and that mere probability or possibility is insufficient).

US 980 likewise fails to teach or suggest the advantageous inventive films including an poly(m-xyleneadipamide)-free layer further exhibiting a gloss of greater than 110, as recited in Claim 19. Considered in its entirely, US 980 clearly indicates that polyamide-free resins impart insufficient barrier properties and are not suitable for use. US 980, merely broadly noting "multilayered" hollow articles, thus provides no motivation to have applied a poly(m-xyleneadipamide)-free overlayer.

And US 980 most certainly does not teach or suggest advantageous inventive films containing from 4 to 30 wt % poly(m-xyleneadipamide), exhibiting both an oxygen transmission (OTR) smaller than 50 $cm^3\ m^{-2}\ d^{-1}\ bar^{-1}$ and an opacity of less than 10%, i.e. a transparency of 90% or more. US 980 instead expressly teaches that only virgin polyester, i.e. poly(m-xyleneadipamide –free polyester, would have such an elevated transparency. Hence there would have been no expectation of success for the advantageous embodiments of Claim 23, based on the teachings of US 980.

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Accordingly, Applicants respectfully submit that Claims 1 through 3, 7 through 11, 13 through 20, 22 and 23 are patentable in light of US 980.

CONCLUSION

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1 through 3, 7 through 11, 13 through 20, 22 and 23 are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

It is not believed that extensions of time or fees are required, beyond those which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time and/or fees are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required is hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,

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